



**HOUSTON HEALTH**  
DEPARTMENT



**Office of Surveillance & Public Health Preparedness**  
*Program of Public Health Informatics*

**Heat Surveillance Monthly Report**  
**August 2015**

**Highlights**

- As of August 2015, there was 1 heat-related death in the Houston area in 2015. The mortality occurred in a male, 53 year old on July 13, 2015. In 2013 and 2014, there were 6 and 2 heat-related deaths respectively.
- This season 209 Emergency Center (EC) visits were related to Heat Related Illness (HRI) from March 2015 to August 2015.
- An EC visit is counted as HRI when chief complaints include variations of heat exhaustion, heat stroke, heat cramps, overheating, etc. Every month heat exhaustion accounts for the majority of HRI EC visits.
- From 2013 to 2015, heat related deaths are more likely to occur when the average maximum temperatures are above 90 degrees Fahrenheit.
- EC visits due to HRI have increased consistently from March 2015 to August 2015. The highest count (n=9) in any given day of HRI occurred on July 27 and August 24.
- Seventy-seven percent (77%) of EC visits for HRI occur among men. The age-group that accounts for the most (88%) ED visits due to HRI is 18 to 64 years of age.
- EC visits due to HRI have occurred in ZIP codes across the Greater Houston Metropolitan Area. The ZIP codes with counts higher than five are 77520, 77015, 77365, 77536, 77357, 77396, and 77530.

Table 1. Occurrence of Heat-Related Events in Houston, 2013 to 2015

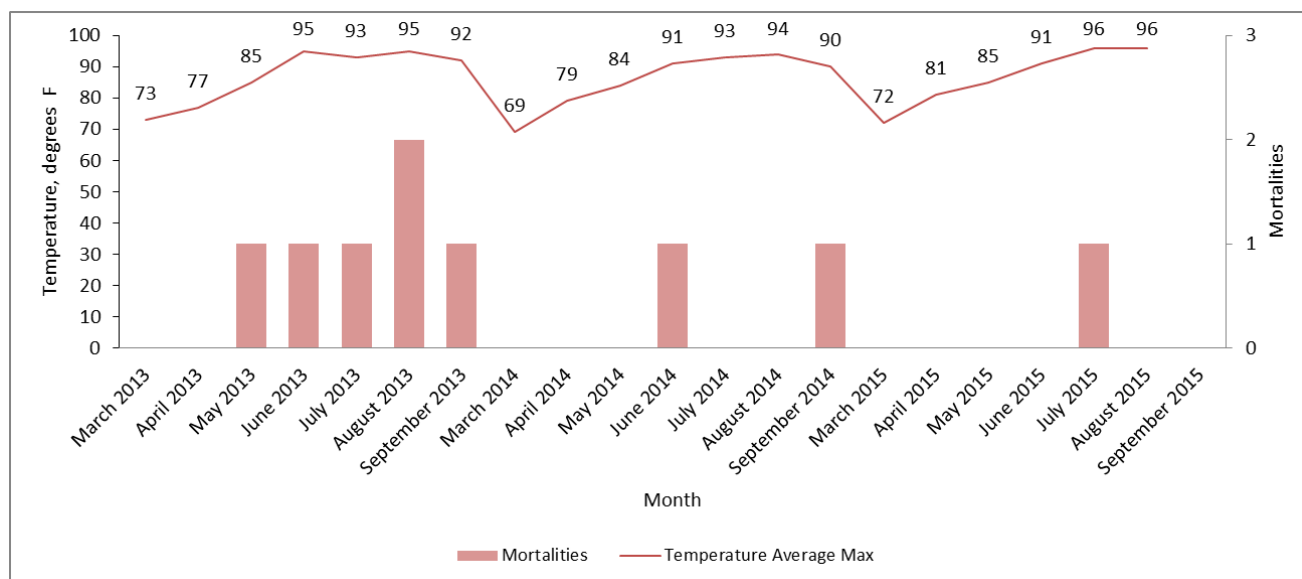
Year	2013	2014	2015
# of heat-related illnesses in Houston/Harris County	144	151	208 <sup>a</sup>
# of heat-related deaths in Houston	6	2	1 <sup>b</sup>
Total heat-related events	150	153	209

a) Heat related illness for 03/25/2015 to 08/31/2015

b) Heat related deaths for 2015 as of 08/18/2015

Table 2. Heat Related Illness by type and month, March 2015 to August 2015

HRI types	Mar	Apr	May	Jun	Jul	Aug	TOTAL
Heat Cramps	0	1	1	2	4	2	10
Heat Exhaustion	0	5	2	26	42	46	121
Heat Stroke	1	1	2	10	13	4	31
Other	0	0	4	14	17	11	46
Heat Related Death	0	0	0	0	1	0	1
Total	1	7	9	52	77	63	209

Figure 1. Heat related deaths <sup>c</sup> by month, 2013 to 2015

<sup>c</sup> A heat related death is defined as a death whose primary cause is related to excessive heat.

Figure 2. Epi Curve for Heat related illness (HRI) from visits to emergency center, March 2015 to August 2015

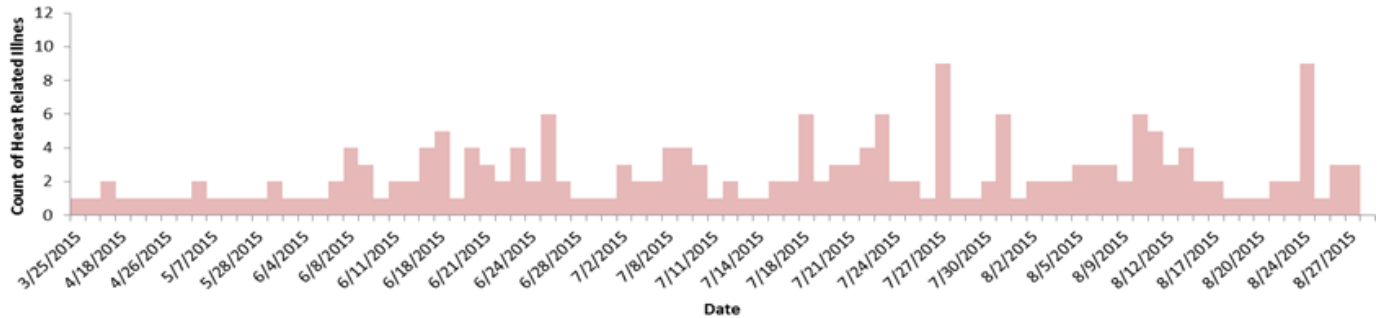


Figure 3. Heat related illness by age-group and gender, March 2015 to August 2015

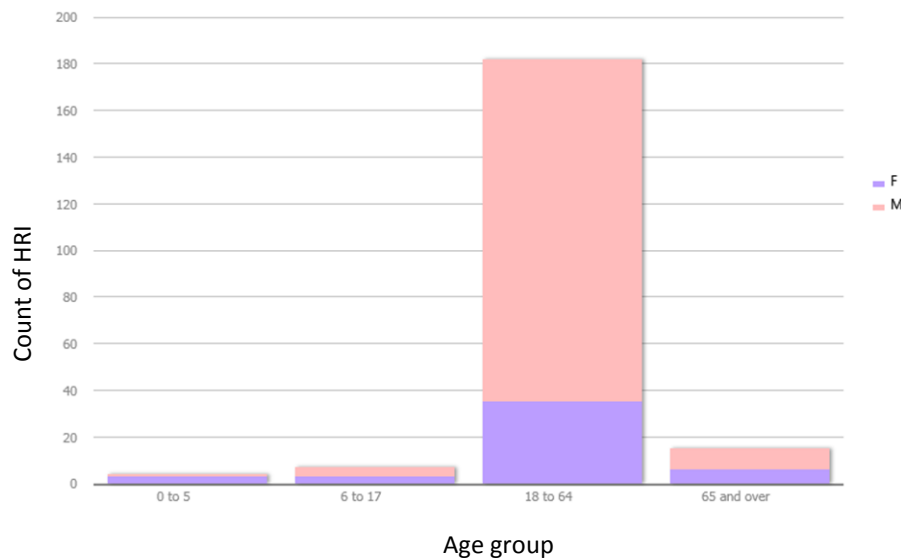
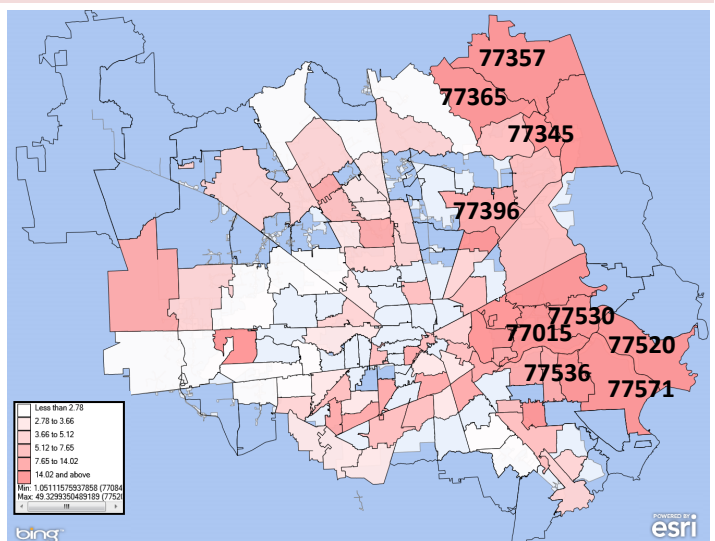


Figure 4. Map of Heat-related illness in Greater Houston Metro Area

Zip	Heat	Rate
77520	18	49.3
77015	10	18.6
77365	8	31.0
77536	7	22.8
77357	6	30.0
77396	6	13.9
77530	6	19.3
77345	5	19.1
77571	5	14.0

For population level rates, rates calculated on cell counts less than 20 are considered unstable and interpreted with caution.



## Tips for Prevention of Heat-related Illness

The Houston Health Department (HHD) recommends Houstonians begin taking precautions against high temperatures to avoid heat-related illnesses. High body temperatures can lead to damage to the brain or other vital organs and even death.

### What Can You Do?

#### Stay cool.

- Find an air-conditioned shelter
- Avoid direct sunlight
- Wear lightweight, light-colored clothing
- Take cool showers or baths
- Do not rely on a fan as your primary cooling device

#### Stay hydrated.

- Drink more water than usual
- Don't wait until you're thirsty to drink more fluids
- Avoid alcohol or liquids containing high amounts of sugar
- Remind others to drink enough water

#### Stay informed.

- Check local news for extreme heat alerts and safety tips
- Learn the symptoms of heat illness

For more information regarding prevention tips for heat-related events, please see:

<http://ephtracking.cdc.gov/showClimateChangeExtremeHeat.action>

*The Houston Heat Surveillance Annual Report is available on the Houston Health Department web site at:*

[www.houstontx.gov/health/](http://www.houstontx.gov/health/)

*NOTE: Additional information regarding extreme heat can be accessed at: <http://emergency.cdc.gov/disasters/extremeheat/>*

*NOTE: Data for Heat Related Illness is obtained from RODS system. The system retrieves Emergency Center chief complain data from over 35 emergency centers in the Greater Houston Metropolitan Area.*

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